

Title (en)
CHARGING CIRCUIT AND CHARGING METHOD FOR AN ELECTRICAL ENERGY STORAGE SYSTEM

Title (de)
LADESCHALTUNG UND LADEVERFAHREN FÜR EIN ELEKTRISCHES ENERGIESPEICHERSYSTEM

Title (fr)
CIRCUIT DE CHARGE ET PROCÉDÉ DE CHARGE POUR UN SYSTÈME ÉLECTRIQUE D'ACCUMULATION D'ÉNERGIE

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Application
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Abstract (en)
[origin: WO2017102414A1] The invention relates to a charging circuit (200) for an electrical energy storage system (100) having n electrical energy storage units (R1, R2). The charging circuit (200) comprises at least a first input (E1) and a second input (E2) for electrically connecting to an energy source, at least a first output (A1) and a second output (A2), and at least n first pole connections (P1) and n second pole connections (P2), wherein the pole connections can be connected in an electrically conductive manner to corresponding pole connections of the electrical energy storage units. In addition, the charging circuit comprises at least n first switches (S11, S12), at least n second switches (S21, S22), and at least n third switches (S31), wherein the first output (A1) is connected in an electrically conductive manner to the first first switch (S11), the second output (A2) is connected in an electrically conductive manner to the first second connection, the first input (E1) is connected in an electrically conductive manner to the nth first switch, the second input (E2) is connected in an electrically conductive manner to the first second switch, and the first second and third switches are connected in such a way that, by means of an energy source connected to the first input (E1) and the second input (E2), a voltage level at least twice as high as the voltage level between the first output (A1) and the second output (A2) is present between the first input (E1) and the second input (E2) during charging operation. The invention further relates to a charging method for the charging operation of an electrical energy storage system, to such an electrical energy storage system (100), and to a use of a charging circuit (200) according to the invention.

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